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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,206	06/22/2001	Dong Do Lee	P66761USO	6181
43569	7590	10/03/2005	EXAMINER	
MAYER, BROWN, ROWE & MAW LLP 1909 K STREET, N.W. WASHINGTON, DC 20006			MOORE JR, MICHAEL J	
			ART UNIT	PAPER NUMBER
			2666	

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/857,206

Applicant(s)

LEE ET AL.

Examiner

Michael J. Moore, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8 is/are allowed.
- 6) ☒ Claim(s) 1,2 and 6 is/are rejected.
- 7) ☒ Claim(s) 3-5 and 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/25/2005 has been entered.

### ***Specification***

2. The disclosure is objected to because of the following informalities:

On page 5, line 5, "channel estimator 23" should be "channel estimator 32" in order to correspond to Figure 3.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims **1, 2, and 6** are rejected under 35 U.S.C. 102(e) as being anticipated by Takano (U.S. 5,924,043). Takano teaches all of the limitations of the listed claims with the reasoning that follows.

Regarding claim 1, “an apparatus for controlling uplink transmitting power in a CDMA mobile station” is anticipated by the transmit power controller 190a of Figure 10 spoken of on column 13, line 24 – column 14, line 3.

“A channel estimator detecting power magnitude and/or phase of a specific channel of received downlink signals based on the received downlink signals” is anticipated by transmit power controller 190a (channel estimator) of Figure 10 that receives a plurality of TPC bits (power magnitude information detected from received downlink signals) from base station 101 as spoken of on column 13, lines 46-50.

“A speed estimator estimating a moving speed of the mobile station based on the detected power magnitude and/or phase” is anticipated by speed detector 192 of Figure 10 that detects mobile unit speed as spoken of on column 13, lines 12-16 as well as on column 13, lines 33-37.

“A step adjuster changing the size of a power control step based on the estimated moving speed” is anticipated by step selector 116 of Figure 10 that selects an optimal step size based upon the detected speed as spoken of on column 13, lines 33-37.

“A demodulator extracting a power control command contained in the received downlink signals” is anticipated by accumulator 114 of Figure 10 that stores TPC bits

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(power control command) received from base station 101 as spoken of on column 13, lines 46-50.

Lastly, “a power level controller adjusting power level of transmitting signals by the changed power control step size according to the extracted power control command” is anticipated by transmit power controller 190a of Figure 10 that uses speed detector 192 as well as step selector 116 to adjust transmitting power level as spoken of on column 13, lines 28-58.

Regarding claim 2, “wherein the specific channel is a pilot channel” is anticipated by the TPC bit transmission over a traffic channel (pilot channel) spoken of on column 2, lines 18-23.

Regarding claim 6, “a method of controlling uplink transmitting power in a CDMA communication system” is anticipated by the transmission power adjusting method performed by transmit power controller 190a of Figure 10 spoken of on column 13, lines 25-58.

“Receiving downlink signals” as well as “detecting power magnitude and/or phase of a specific channel of the received downlink signals based on the received downlink signals” is anticipated by the reception of a plurality of TPC bits (power magnitude information detected from received downlink signals) from base station 101 as spoken of on column 13, lines 46-50.

“Extracting a power control command from the received downlink signals” is anticipated by accumulator 114 of Figure 10 that stores TPC bits (power control command) received from base station 101 as spoken of on column 13, lines 46-50.

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“Estimating a moving speed of a mobile station based on the detected power magnitude and/or phase” is anticipated by speed detector 192 of Figure 10 that detects mobile unit speed as spoken of on column 13, lines 12-16 as well as on column 13, lines 33-37.

“Changing a power control step size based on the estimated moving speed” is anticipated by step selector 116 of Figure 10 that selects an optimal step size based upon the detected speed as spoken of on column 13, lines 33-37.

Lastly, “increasing or decreasing power level of transmitting signals by the changed power control step size according to the extracted power control command” is anticipated by transmit power controller 190a of Figure 10 that uses speed detector 192 as well as step selector 116 to adjust transmitting power level as spoken of on column 13, lines 28-58.

#### ***Allowable Subject Matter***

5. Claim 8 is allowable over the prior art of record.
6. Claims 3-5 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

7. Applicant's arguments filed 8/25/2005 have been fully considered but they are not persuasive.

Regarding amended claims 1 and 6, Applicant argues that the accumulating and counting of TPC bits to determine a step size as in *Takano* is not the same as using a

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specific channel of received downlink signals to determine a power magnitude of the received downlink signal.

However, it is held that Takano does teach this limitation. The transmit power controller 190a (channel estimator) of the mobile unit of Figure 10 receives a plurality of TPC bits from base station 101 that indicate power magnitude information related to a communication channel between the mobile unit 102 and the base station 101 as described above. It is held that this teaching anticipates “detecting a power magnitude and/or a phase of a specific channel of the received downlink signals based on the received downlink signals”.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Moore, Jr. whose telephone number is (571) 272-3168. The examiner can normally be reached on Monday-Friday (8:30am - 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached at (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael J. Moore, Jr.  
Examiner  
Art Unit 2666

mjm MM



**FRANK DUONG**  
**PRIMARY EXAMINER**